Page 1

April-12-13 8:12:00 AM Item ID: D4072-1 Accept *N900040100* Setup Start **Revision ID:** Item Name: Airframe Hinge **Start Date:** 4/08/13 **Start Qty: 12.00** *12* **Cust Item ID:** Required Date: 4/11/13 Req'd Qty: 12.00 *12* **Customer:** Reference: Run Process Plan: MLJ Date: 13-04-17 Tooling: **Approvals:** Date: Stop Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool # Plan Tool ID Reject Accept Reject Insp. **Work Center ID** Description **Run Hours** Qty Qty Number Stamp Code Draw Nbr **Revision Nbr** D4072 В 100 Cut blanks as per folio 0.00 DAS *100* D.A 13/04/22 Bandsaw 0.00 Memo Jeaspa Bandsaw **CUT 1.250" LONG** .105 0.00 13/04/25 *105* HAAS I 0.00 Memo HAAS CNC vertical machine #1 Mill as per Dwg an Folio FA938 Dwg Rev: 3 Folio Rev: AA

Deburr

										DQA:	Date:	
NCR: Y	es / N	o			WORK ORDER NON-C	ON	IFORN	/ANCE / UP	DATE	QA Closed:	Date:	
W 101	-				DISPOSITION				AGAINST D	EPARTMENT		
Part No	0				Rework Scrap Use-as-is Work Order Update		Therm	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root	<u> </u>			Descri	ption of work order update	11	nitial		tion	Sign &		
Cause	Dat	e Step	Qty	(or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved												
					F.	AUL	T CATE	GORY				
Landin	Bendi Centr Crack Crush Cuffs Heat	e Not Conces ed/Crimped Freat ction Strip i	d. '	o/s	General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short		Instruct Mainte Mislabe Misreac	on Incomplete ions Incomplete/ nance led	'Unclear	Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned	ct ssing Wrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
	Ripple	s in Bend			Drill Holes		Offset					

Drawing

Finish

Folio

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

April-12-13 8:12:00 AM

Required Date: 4/11/13

Item ID:

D4072-1

Accept

N900040100

Setup Start

Revision ID: Item Name:

Start Date:

Airframe Hinge

4/08/13

Start Qty: 12.00 Req'd Oty: 12.00

Operation

Description

12

Cust Item ID:

Customer:

Tool ID

Reference:

Process Plan: Date: Approvals:

Tooling:

Date:

Start

_____ Date:

SPC (Y/N):

Set Up/

Date:

Stop

Run

110

Sequence ID/

Work Center ID

110

QC

Memo

QC2- Inspect parts off machine FAI/FAIB

Run Hours 0.00

0.00

Tool # Plan

Accept Code Qty

Reject Qty

Reject Number

Stamp

Insp.

Quality Control

120

120

QC

Quality Control

QC8- Inspect parts - second check

Memo

0.00

0.00

RO/St 13/04/25

150

150

HandFinish Hand Finishing Chemical Conversion Coat per QSI005 4.1

0.00

Memo

0.00

										DQA:	Date	<u>.</u>
Yes /	No				WORK ORDER NON-C	ON	NFORM	MANCE / UP		OA Closed:	Date	
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er: No No					Rework Scrap Use-as-is Work Order Update		Therm	Machining noforming	Crosstube Small Fab Finishing Composite			Engineering Quality Other
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D	ate	Step	Qty	C	or Non-conformance	Chi	ief Eng	Desc	ription	Date	Verification	QC Inspector
)												
						AUL'	T CATE	GORY			-	
Ben Cen Crac Crus Cuff Hea Insp	ding tre Not tks shed/Cr s t Treat ection S	imped. Strip in Bend	Tube		Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes		Hardwa Inspecti Instruct Mainte Mislabe Misread Offset	on Incomplete ions Incomplete/ enance iled	Unclear	Part Incorre Part Lost/M Part Moved Positioned V	ct ssing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
	Io Io Io Io Io Io Io Ing Gear Ben Cen Crac Crac Crus Cuff Hea Insp	Date Date Bending Centre Not Cracks Crushed/Cr Cuffs Heat Treat Inspection Ripples in E	Date Step Date Step	Date Step Qty Date Step Qty Bending Centre Not Concentric to C Cracks Crushed/Crimped. Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend	Date Step Qty Date Step Qty Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube	DISPOSITION Rework Scrap Use-as-is Work Order Update Date Step Qty Description of work order update or Non-conformance Page Gear General Bending Centre Not Concentric to O/S Cracks Crushed/Crimped. Cuffs Cuffs Contamination Countersink Inspection Strip in Tube Ripples in Bend Drill Holes	Primary Fault Step Oty Description of work order update or Non-conformance Chapter Step Oty Oty Or Non-conformance Chapter Step Oty	Paris Disposition Rework Scrap Use-as-is Work Order Update Initial Chief Eng Chief Eng	DISPOSITION Rework Scrap Use-as-is Work Order Update Or Non-conformance Date Step Qty Description of work order update Or Non-conformance FAULT CATEGORY General Bending Centre Not Concentric to O/S Cracks Broken/Damaged Instructions Incomplete Crushed/Crimped. Burrs Contamination Centre Not Concentric to O/S Cracks Cracks Contamination Custom Maintenance Mislabeled Inspection Strip in Tube Countersink Cit Too Short Misread Offset	DISPOSITION Rework Scrap Machining Small Fab Shid-tube Crosstube Machining Small Fab Composite Date Step Qty Description of work order update Large Fab Composite Date Step Qty Or Non-conformance Chief Eng Description FAULT CATEGORY Rework Skid-tube Crosstube Machining Small Fab Composite Large Fab Composite Composite Date Step Qty Or Non-conformance Chief Eng Description FAULT CATEGORY Rework Skid-tube Composite Composite Chief Eng Composite Rework Machining Small Fab Chief Eng Composite Rework Skid-tube Chief Eng Composite Chief Eng Composite Rework Machining Small Fab Composite Chief Eng C	WORK ORDER NON-CONFORMANCE / UPDATE OA Closed: DISPOSITION Rework Scrap Work Order Update Use-as-is Use	WORK ORDER NON-CONFORMANCE / UPDATE OA Closed: Date DISPOSITION Rework Scrap Use-as-is Work Order Update Date Date Step Qty Description of work order update Composite Date Date Step Qty Description of work order update Chief Eng Date FAULT CATEGORY Gear General Bending Centre Not Concentric to O/S Cracks Broken/Damaged Broken/Damaged Curbes description incomplete Instructions Incomplete Inspection incomplete/Unclear Instructions Incomplete/Unclear Maintenance Part Moved Part Incorrect Part Moved Pa

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Packaging

Memo

April-12-13 8:12:00 AM Item ID: D4072-1 Accept *N900040100* Setup Start Revision ID: Item Name: Airframe Hinge **Start Date:** 4/08/13 **Start Qty: 12.00** Cust Item ID: Required Date: 4/11/13 Req'd Qty: 12.00 **Customer:** Reference: Run Process Plan: _____ Date: ____ Tooling: Approvals: Date: Stop QC: ____ Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Accept Reject Reject Insp. Work Center ID Description **Run Hours** Qty Code Qty Number Stamp White Gloss(Ref:4.3.5.2) per QSI005 4.3-Steel 160 *160* Powdercoat Powder Coating 170 QC3- Inspect Part Finish 0.00 *170* 0.00 Memo Quality Control 180 Identify as per dwg & Stock Location *120* <u> 13x ____</u> Packaging 0.00

											DQA:	Date:	
NCR:	res /	No				WORK ORDER NON-	CO	NFORI	MANCE / UP	DATE	QA Closed:	 Date:	
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Work Orde	er:					DISPOSITION				AGAINST DE	- AKTIVILIYI -		_
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Cause	Da	te	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector
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Equip/Tooling		1											
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	Bend	_				Bend	<u> </u>	Grain		ļ	Ovalized	<u> </u>	Pressure/Forced
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	Crac				-	Broken/Damaged	<u> </u>	4 .	ion Incomplete	,	Part Incorre	 	Weld
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	Cuffs				<u> </u>	Contamination	\vdash	Mainte		<u> </u>	Part Moved	A /	
	_	Treat			<u> </u>	Countersink	\vdash	Mislabe		ļ	Positioned \		70.60
			Strip in	Tube	<u> </u>	Cut Too Short	-	Misread	1	<u>L</u> .	Power Loss/	Surge	Other
	——		Bend		<u> </u>	Drill Holes	\vdash	Offset					
	Torq	ue W	aves in E	xtrusio	n [Drawing		Out of 0	Calibration				

Out of Sequence

Outside Dimensions

Turning Sequence Wave/Twist in Tube Finish

Folio

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April-12-13 8:12:00 AM

Quality Control

Item ID: Revision ID:	D4072-1			Accept	*N900	040	100)* ፡	Setup	Start	*N	S1*	
Item Name:	Airframe H	inge			-					Stop	*N	S2*	
Start Date:	4/08/13	Start Qty: 12.00	*12*		Cust Item	ID:						-	
Required Date	:: 4/11/13	Req'd Qty: 12.00	*12*		Customer:								
Reference:			• •										
Approvals:	Process P	Plan:	Date:	Tooling: _	D	ate:	_	I	Run	Start	*N	R1*	
	QC:		Date:	SPC (Y/N):	D	ate:				Stop	*N	R2*	
Sequence ID/ Work Center I	ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp	-
190 *190*		QC21- Final Inspection -	Work Order Release	0.00							1		
QC QC		Memo		0.00						36	5/8	- X	

\$ (3.05.7

											DQA:	-Date:		
NCR: Y	es / No				WORK ORDER NON-	CON	IFORM	MANCE	/ UPC	DATE	QA Closed:	Date	:	
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Part N	0.				Rework Scrap Use-as-is Work Order Update		f Therm	Skid-tube Machining noforming Large Fab		Small Fab Prod. Eng. Coor. Q Finishing Rec/Store/Packaging				
Root					ption of work order update		nitial		Acti		Sign &	N		
Cause	Date	Step	Qty	. (or Non-conformance	Chi	ief Eng	•	Descri		Date	Verification	QC Inspector	
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Landin	g Gear			_	General	<u>—</u>				_	7	_	-	
	Bending				Bend	\vdash	Grain				Ovalized	<u> </u>	Pressure/Forced	
	Centre No	ot Concei	ntric to O)/S	BOM/Route		Hardwa			ļ	Over/Under	 	Temperature/Cure	
1	Cracks			<u> </u> _	Broken/Damaged	-	•	ion Incomp		<u> </u>	Part Incorre	. –	Weld	
	Crushed/	Crimped.	-	<u></u>	Burrs			tions Incom	iplete/U	Jnclear	Part Lost/M	issing	Wrong Stock Pulled	
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	Heat Trea	at		L	Countersink	\vdash	Mislabe			<u> </u>	Positioned V	- · · · · -	·	
	Inspectio	n Strip in	Tube	<u> </u>	Cut Too Short	\vdash	Misread	đ		L_	Power Loss/	Surge 📜	Other	
	Ripples in				Drill Holes	├	Offset					79.8		
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	Turning S	equence		L	Finish	—		Sequence						
1	Wave/Tw	ist in Tub	oe .	1	Folio		Outside	Dimensio	ns					

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Picklist Print

April-12-13 8:12:03 AM

Work Order ID: 99843

Parent Item: D4072-1

99843

D4072-1

Parent Item Name: Airframe Hinge

Start Date: 4/08/13

Required Date: 4/11/13

Start Qty: 12.00

Required Qty: 12.00

Comments:

Ipp Rev:A New Issue 10-06-09 JLM Verified By:DD REV:B DRAWING REV. CHANGE AS PER ECN 11-598

IPP 11-07-05 JFS

VERIFIED BY:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status	
M6061T6B1.000X02.50 0		Purchased	No			100	f	15.0784	0.104	1.313684				•
Jan 1000 1 - 0										Δ				

M6061T6B1 000X02 500

Location	Loc Oty	Loc Code	
MAT003	15.078421		
المجادة 114993	3.078421		3.0784 ft
124443	12		

									DQA:	Date	:
NCR: Y	es / No				WORK ORDER NON-C	CONFOR	MANCE / UPD		QA Closed:	Date	:
18/ - ul. Oud a			··· »		DISPOSITION			AGAINST DE	- 1. A. A. T. T. T. T. T. T. T. T. T. T. T. T. T.	PROCESS	
	lo				Rework Scrap Use-as-is Work Order Update	-1 1	Skid-tube Machining moforming Large Fab	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Descri	ption of work order update	Initial	Actio	on	Sign &	- 	
Cause	Date	Step	Qty	(or Non-conformance	Chief Eng	Descrip	otion	Date	Verification	QC Inspector
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup		İ	}								
Other											
Process] 		
Supplier											
Training											
Unapproved									<u></u>		
					F	AULT CATE	GORY				
Landir	ng Gear				General				7		-
	Bending				Bend	Grain			Ovalized	<u> </u>	Pressure/Forced
	Centre N	ot Conce	ntric to	O/S	BOM/Route	Hardw			Over/Under	<u> </u>	Temperature/Cure
	Cracks				Broken/Damaged	—	tion Incomplete		Part Incorre	 	Weld
	Crushed/	Crimped.			Burrs	-	tions Incomplete/Ui	nclear	Part Lost/M	issing	Wrong Stock Pulled
	Cuffs			L	Contamination	—	enance		Part Moved		
	Heat Trea	at			Countersink	Mislab	eled		Positioned \		1
	Inspectio	n Strip in	Tube	<u></u>	Cut Too Short	Misrea	d	L.	Power Loss,	'Surge	Other
	Ripples in	n Bend		_	Drill Holes	Offset					
	Torque V	Vaves in E	xtrusio	n	Drawing	⊢	Calibration				
	Turning S	equence		[Finish	Out of	Sequence				

Outside Dimensions

Wave/Twist in Tube

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

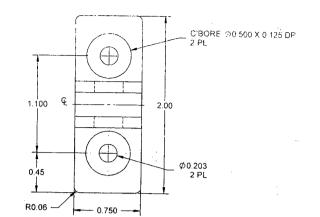
DART AEROSPACE LTD	Work Order:	99843
Description: Airframe Hinge	Part Number:	D4072-1
Inspection Dwg: D4072 Rev: B		Page 1 of 1

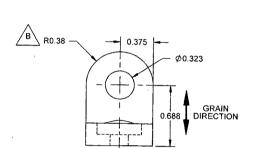
FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.500 x 0.125	+/-0.010	-501X-123			nern	21-10
2.00	+/-0.030	2.00	/			
Ø0.203	+0.005/-0.001	-204			_	·
0.750	+/-0.010	750			•	•
R0.06	+/-0.030	-06	/			
0.45	+/-0.030	.455	/		-	
1.100	+/-0.010	1.100	/		5	,
R0.38	+/-0.030	375			Ţ	
0.375	+/-0.010	-375			`.	
0.688	+/-0.010	-687			~	·
0.275	+/-0.010	-272			- 7	
R0.13	+/-0.030	.125				
0.25	+/-0.030	-245	/		÷	
1.06	+/-0.030	1-059			<u>.</u> .	10
0.125	+/-0.010	128			~	·
0.86	+/-0.030	-865	//		H-G	
Ø0.323	+0.005/-0.001	325			Ibin	SI - 10
:						

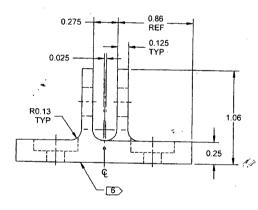
Measured by:	Audited by: PD/	Preliminary Approval:	
Date: 13-1-24	Date: 13/04/25	Date:	

Rev	Date	Change	Revi	sed by	Approved
Α	11.06.26	New Issue	KJ	$-\alpha$	- 11
В	11.10.13	Dimension 0.25 removed	KJ	- 	
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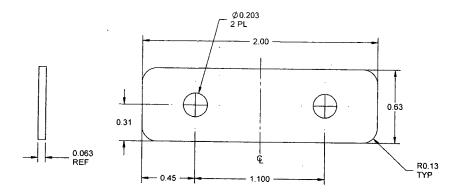


D4072-1 AIRFRAME HINGE

NOTES:
1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM-BAR
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMD 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMD 4117/4128/4115/4116)
OR ASTM B211 OR ASTM B221
REF DART SPEC M6061T6B
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: PER QSI 044 6.1
7) WEIGHT: 0.04 lbs

8

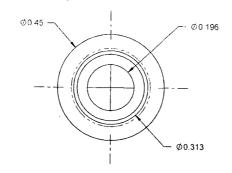
В	CORRECT TYPO (ZN 87-1) RF 10.1				10.11.02
Α.	NEW ISSUE-			RF	10.09.16
REV.	DESCRIPTION			BY	DATE
DESIGN 65		45	DART AEROSPACE USA, INC.		
DRAWN		RF	PORT HADLOCK, WA		,
CHECKED		4	DRAWING NO.		REV. B
MFG. APPR.		94	D4072		SHEET 1 OF 3
APPROVED -		4	TITLE	······································	SCALE
DE APPR.		#	AIRFRAME HINGE		NTS
DATE 10.11.02			COPYRIGHT © 2016 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND COMPONITY, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS		

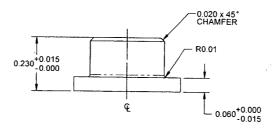


D4072-3 AIRFRAME HINGE BACKING PLATE

NOTES:
1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET, 0.063 THICK
PER QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027
OR ASTM B209
REF DART SPEC M6061T6S.063
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
3) TOLERANCES: PER DART OSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: PER QSI 044 6.1
7) WEIGHT: 0.01 lbs

DESIGN RE		DART AEROSPACE USA, INC.		
		PORT HADLOCK, WA		
CHECKED	#.	DRAWING NO.	REV. B	
MFG. APPR.	94	D4072	SHEET 2 OF 3	
APPROVED	#	TITLE	SCALE	
DE APPR.	#	AIRFRAME HINGE	NTS	
DATE 10.1	1.02	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS FRONTE AND COMEDITION WITH DEPARTS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMED OR COMMANDATED TO ANY OTHER PERSON WITHOUT WITHIN FEMILISSIN FROM CART ARROPMES USA, INC.		
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D4072-5 BUSHING

NOTES:
1) MATERIAL: AISI 303 STAINLESS STEEL BAR
REF DART SPEC. M303B

REF DART SPEC. M303B

2) FINISH: N/A

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: PER QSI 044 6.1

7) WEIGHT: 0.004 lbs

8

DESIGN	RF	DART AEROSPACE USA, INC.		
DRAWN RF		PORT HADLOCK, WA		
CHECKED	#	DRAWING NO.	REV F	
MFG, APPR.	P	D4072	SHEET 3 OF	
APPROVED	#	TITLE	SCALI	
DE APPR.	#	AIRFRAME HINGE	NTS	
DATE 10.1	1.02	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IN PRIVATE AND COMPORTING AND IS SUPPLIED ON THE EXPRESS CONCIDENT THAT IT IS NOT TO BE USED FOR ANY PURPOSE OF GOODED OR COMPREDICTATION THAT OF THE PROPERTY.		